
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS

Volume 53 Issue 5 (2024)

E-ISSN: 2651-477X

Honorary Editor

Lawrence Michael Brown

Editor in Chief

Mathematics

Murat Diker (Hacettepe University, Mathematics - hjms@hacettepe.edu.tr)

Statistics

Nursel Koyuncu (Hacettepe University, Statistics - statisticshjms@gmail.com)

Associate Editors

Derya Ersel (Hacettepe University, Statistics - dtektas@hacettepe.edu.tr)

Yasemin Kayhan Atılgan (Hacettepe University, Statistics - ykayhan@hacettepe.edu.tr)

Production Editors

Talha Arıkan (Hacettepe University, Mathematics - tarikan@hacettepe.edu.tr)

İsmail Aslan (Hacettepe University, Mathematics - ismail-aslan@hacettepe.edu.tr)

Dolunay Ezgi Gümüşbaş (Hacettepe University, Statistics - dolunayyezgi@hacettepe.edu.tr)

Berke Kaleboğaz (Hacettepe University, Mathematics - bkuru@hacettepe.edu.tr)

Hatice Nur Karakavak (Hacettepe University, Statistics - hatice.karakavak@hacettepe.edu.tr)

Uğur Sert (Hacettepe University, Mathematics - usert@hacettepe.edu.tr)

Serhan Tunçel (Hacettepe University, Statistics - serhan.tuncel@hacettepe.edu.tr)

O. Oğulcan Tuncer (Hacettepe University, Mathematics - otuncer@hacettepe.edu.tr)

Sema Yayla (Hacettepe University, Mathematics - semasimsek@hacettepe.edu.tr)

Area Editors

Mathematics

Angel Del Rio (Algebra, Group Theory - adelrio@um.es)

Naoki Endo (Commutative Rings and Algebras - nendo@rs.tus.ac.jp)

Sergio Estrada (Homological Algebra - sestrada@um.es)

Rodrigo Hernandez Gutierrez (General Topology - rod@xanum.uam.mx)

Varga Kalantarov (Partial Differential Equations - vkalantarov@ku.edu.tr)

Serap Öztop Kaptanoğlu (Abstract Harmonic Analysis - oztops@istanbul.edu.tr)

Azer Khanmamedov (Partial Differential Equations - azer@hacettepe.edu.tr)

Adam Lecko (Complex Analysis - alecko@matman.uwm.edu.pl)

Cihan Orhan (Analysis, Summability - orhan@science.ankara.edu.tr)

Abdullah Özbekler (Ordinary Differential Equations - aozbekler@gmail.com)

Ekin Özman (Number Theory, Algebraic Geometry - ekin.ozman@boun.edu.tr)

Mehmetçik Pamuk (Topology, Manifolds and Cell Complexes - mpamuk@metu.edu.tr)

Changguo Shao (Group Theory - shaoguozi@163.com)

Bülent Ünal (Differential Geometry - bulent@fen.bilkent.edu.tr)

Dingguo Wang (Hopf Algebras, Tensor Categories - dgwang@qfnu.edu.cn)

Sibei Yang (Harmonic Analysis and Functional Analysis - yangsb@lzu.edu.cn)

Xin Zhang (Graph Theory and Combinatorics - xzhang@xidian.edu.cn)

Shengda Zeng (Partial Differential Equations, Nonlinear Analysis, Control Theory - zengshengda@163.com)

Yunus E. Zeytuncu (Functions of Several Complex Variables - zeytuncu@umich.edu)

Statistics

Ali Allahverdi (Operational Research & Statistics - ali.allahverdi@ku.edu.kw)

Olcay Arslan (Robust Statistics - oarslan@ankara.edu.tr)

Narayanaswany Balakrishnan (Applied Statistics, Theory of Statistics - bala@mcmaster.ca)

Adil Baykasoglu (Operational Research - adil.baykasoglu@deu.edu.tr)

Haydar Demirhan (Categorical Data Analysis, Monte Carlo Simulation - haydar.demirhan@rmit.edu.au)

Sat Gupta (Sampling, Time Series - sngupta@uncg.edu)

Tahir Hanalioğlu (Stochastic Processes Theory, Probability Theory - tahirhanliyev@etu.edu.tr)

Burcu Hüdaverdi (Time Series Analysis, Multivariate Statistics - burcu.hudaverdi@deu.edu.tr)

Zeynep Işıl Kalaylıoğlu (Bayesian Inference, Model Selection - kzeynep@metu.edu.tr)

Hasan Örkücü (Data Envelopment Analysis, Operation Research - hhorkcu@gazi.edu.tr)

Birdal Şenoğlu (Experimental Design, Statistical Distributions - senoglu@science.ankara.edu.tr)

Contents

Mathematics

Research Articles

- 1 Pointwise hemi-slant Riemannian maps (\mathcal{PHSRM}) from almost Hermitian manifolds
by Mehmet Akif Akyol and Yılmaz Gündüzalp 1218
- 2 New results over Zappa-Szép products via a recent semigroup
by Nurten Urlu Özalan 1238
- 3 Hybrid bi-ideals in near-subtraction semigroups
by S. Meenakshi, G. Muhiuddin, D. Al- Kadi and B. Elavarasan 1250
- 4 On σ - c -subnormal subgroups of finite groups
by JiaHui Liu and ShouHong Qiao 1264
- 5 Numerical-analytic successive approximation method for the investigation of periodic solutions
of nonlinear integro-differential systems with piecewise constant argument of generalized type
by Kuo-Shou Chiu 1272
- 6 Torsion pairs and related modules over trivial ring extensions
by Lixin Mao 1291
- 7 On a sampling problem for a Bargmann-Fock space
by Mohammed El Aidi 1305
- 8 Inner-gMP and gMP-inner inverses
by Dunja Stojanović and Dijana Mosić 1312
- 9 Existence results for positive periodic solutions to first order neutral differential equations
with distributed deviating arguments
by Tunçay Candan 1326
- 10 On the almost h-conformal semi-slant Riemannian maps
by Kwang Soon Park 1333
- 11 An inverse source Cauchy-weighted time-fractional diffusion problem
by Rahima Atmania and Loubna Settara 1354
- 12 Deferred statistical order convergence in Riesz spaces
by Mehmet Küçükaslan and Abdullah Aydın 1368

13	Generalized product-type operators between Bloch-type spaces <i>by Sepideh Nasresfahani and Ebrahim Abbasi</i>	1378
14	List equitable coloring of planar graphs without 4- and 6-cycles when $\Delta(G) = 5$ <i>by Aijun Dong and Wenwen Zhang</i>	1393
15	Extension of the Lotka-Volterra competition model <i>by Sayyed Hashem Rasouli</i>	1401

Statistics

Research Articles

16	On the recent- k -record of discrete random variables <i>by Anshui Li</i>	1408
17	Iterative stochastic restricted rd class estimator in generalized linear models: application to binomial, Poisson and negative binomial distributions <i>by Atif Abbasi and M. Revan Özkale</i>	1419
18	A hard re-descending hybrid robust regression estimation technique using direct weights <i>by Greeshmagiri and Thangavel Palanisamy</i>	1438
19	On some mixtures of the Kies distribution <i>by Tsvetelin Stefanov Zaeovski and Nikolay Kyurkchiev</i>	1453
20	On the ARL of CUSUM in multinomial models <i>by Shangchen Yao and Mohammad Kazim Khan</i>	1484